

CLAIMS:

1. An encapsulation structure for a display device, comprising a dielectric sealing structure (3), characterized in that the encapsulation structure also comprises a stabilisation layer (5).

5 2. An encapsulation structure according to claim 1, wherein said stabilisation layer (5) is of a polymeric material.

10 3. An encapsulation structure according to claim 1 or 2, wherein said sealing structure (3) comprises a first layer (6) of a first dielectric material and a second layer (7) of a second dielectric material.

4. An encapsulation structure according to claim 3, wherein said sealing structure (3) comprises a third layer (8) of a third dielectric material.

15 5. An encapsulation structure according to claim 4, wherein said third dielectric material is the same as said first dielectric material.

20 6. An encapsulation structure according to any of the claims 3 – 5, wherein said first dielectric material is selected from the group comprising silicon nitride, aluminium nitride and any mixture thereof, and wherein said second dielectric material is selected from the group comprising silicon oxide, silicon oxide fluoride, titanium oxide, tantalum oxide, zirconium oxide, hafnium oxide, aluminium oxide and any mixture thereof.

25 7. An encapsulation structure according to any of the claims 3 – 5, wherein said first dielectric material is selected from the group comprising silicon oxide, silicon oxide fluoride, titanium oxide, tantalum oxide, zirconium oxide, hafnium oxide, aluminium oxide and any mixture thereof, and wherein said second dielectric material is selected from the group comprising silicon nitride, aluminium nitride and any mixture thereof.

8. An encapsulation structure according to any of the preceding claims, wherein said stabilisation layer (5) covers at least some protruding structures (4) of said display device, and forms an essentially planar surface over said protruding structures (4).

5 9. An encapsulation structure according to any of the preceding claims, wherein an essentially cavity-free interface is formed between said stabilisation layer (5) and said sealing structure (3).

10. 10. An encapsulation structure according to any of the preceding claims, wherein the thermal expansion coefficient of said stabilisation layer (5) is essentially the same as the thermal expansion coefficient of said sealing structure (3).

11. 11. An encapsulation structure according to any of the preceding claims, wherein the thickness of said stabilisation layer (5) is at least 0.1 µm.

15 12. An encapsulation structure according to any of the preceding claims, wherein said encapsulation structure is transparent.

20 13. An encapsulation structure according to claim 1, wherein said stabilisation layer (5) is of a non-polymeric material.

14. An encapsulation structure according to claim 13, wherein said non-polymeric material is a cured inorganic material.

25 15. An encapsulation structure according to any of the claims 13 – 14, wherein said stabilisation layer (5) covers at least some protruding structures (4) of said display device and forms an essentially planar surface over said covered protruding structures.

30 16. An encapsulation structure according to any of the claims 13 - 15, wherein an essentially cavity-free interface is formed between said stabilisation layer (5) and said sealing structure (3).

17. An encapsulation structure according to any of the claims 13 - 16, wherein the thermal expansion coefficient of said stabilisation layer (5) is essentially the same as the thermal expansion coefficient of said sealing structure (3).

5 18. An encapsulation structure according to any of the claims 13 - 17, wherein the thickness of said stabilisation layer (5) is at least 0.1 µm.

19. An encapsulation structure according to any of the claims 13 - 18, wherein said encapsulation structure is transparent.

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20. An encapsulation structure according to any of the preceding claims, wherein said display device is selected from a polyLED display, a OLED display or a Liquid Crystal Display.

15 21. An encapsulation structure according to any of the preceding claims, wherein said display device comprises protruding structures (4) with negative slopes which forms shadow regions.

22. A method for the manufacture of an encapsulation structure for a display
20 device comprising
depositing a dielectric sealing structure (3), and
depositing a stabilisation layer (5).

23. A method according to claim 22, wherein said depositing of a stabilisation
25 layer (5) comprises
depositing a curable composition, and
curing said curable composition.

24. A method according to claim 23, wherein said curing is thermal curing.
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25. A method according to any of the claims 22 – 24 wherein said stabilisation layer (5) is deposited by inkjet printing.

26. A method according to any of the claims 22 - 25 wherein said display device is selected from a polyLED display, an OLED display and a LCD display.

27. A display device comprising an encapsulation structure according to any of the
5 claims 1 - 21.

28. A display device obtainable by the method according any of the claims 22 -
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